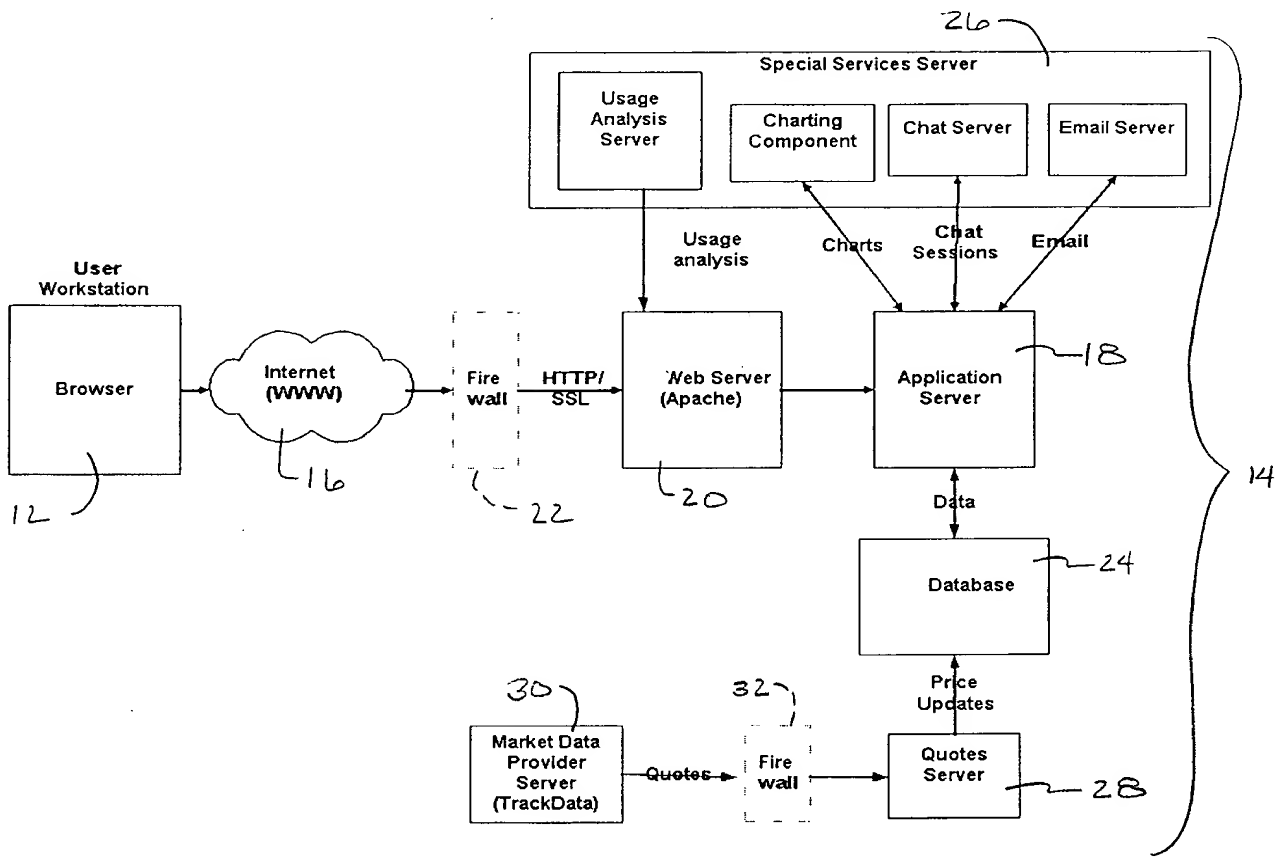


FIG. 1: SYSTEM ARCHITECTURE

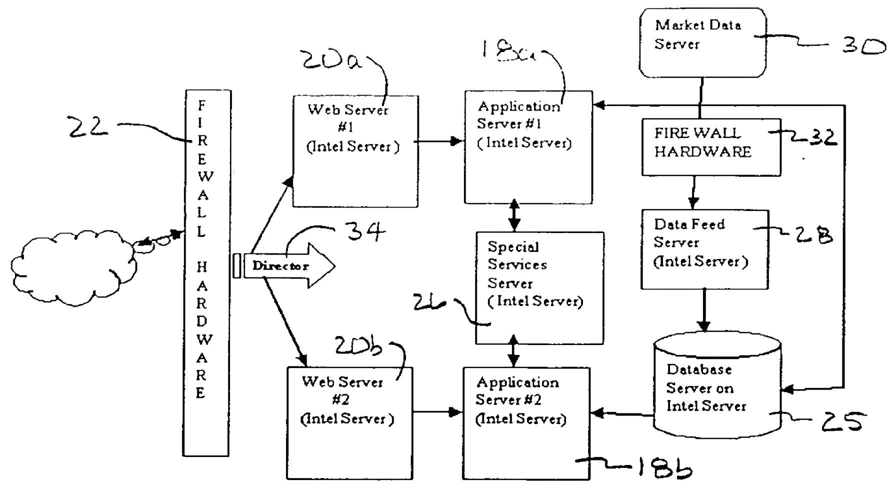


Fig. 2: Physical Deployment of System - Web Farm

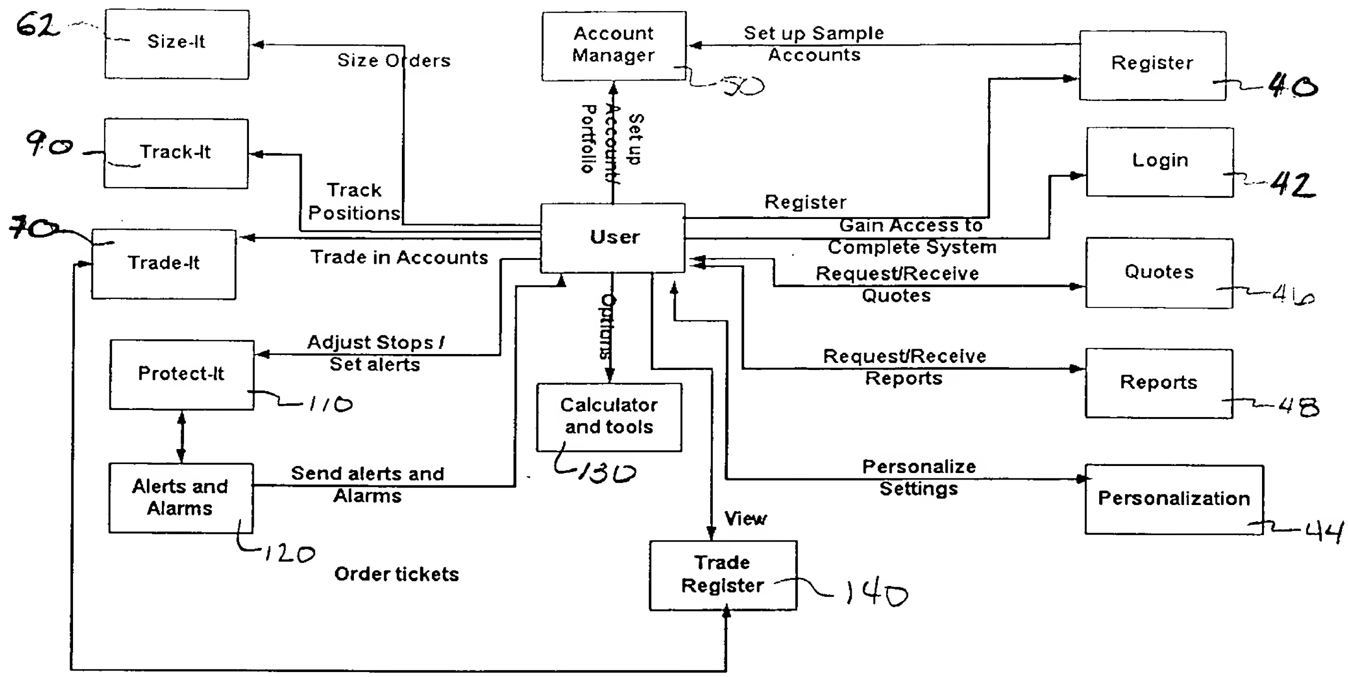


Fig. 3: System Packages

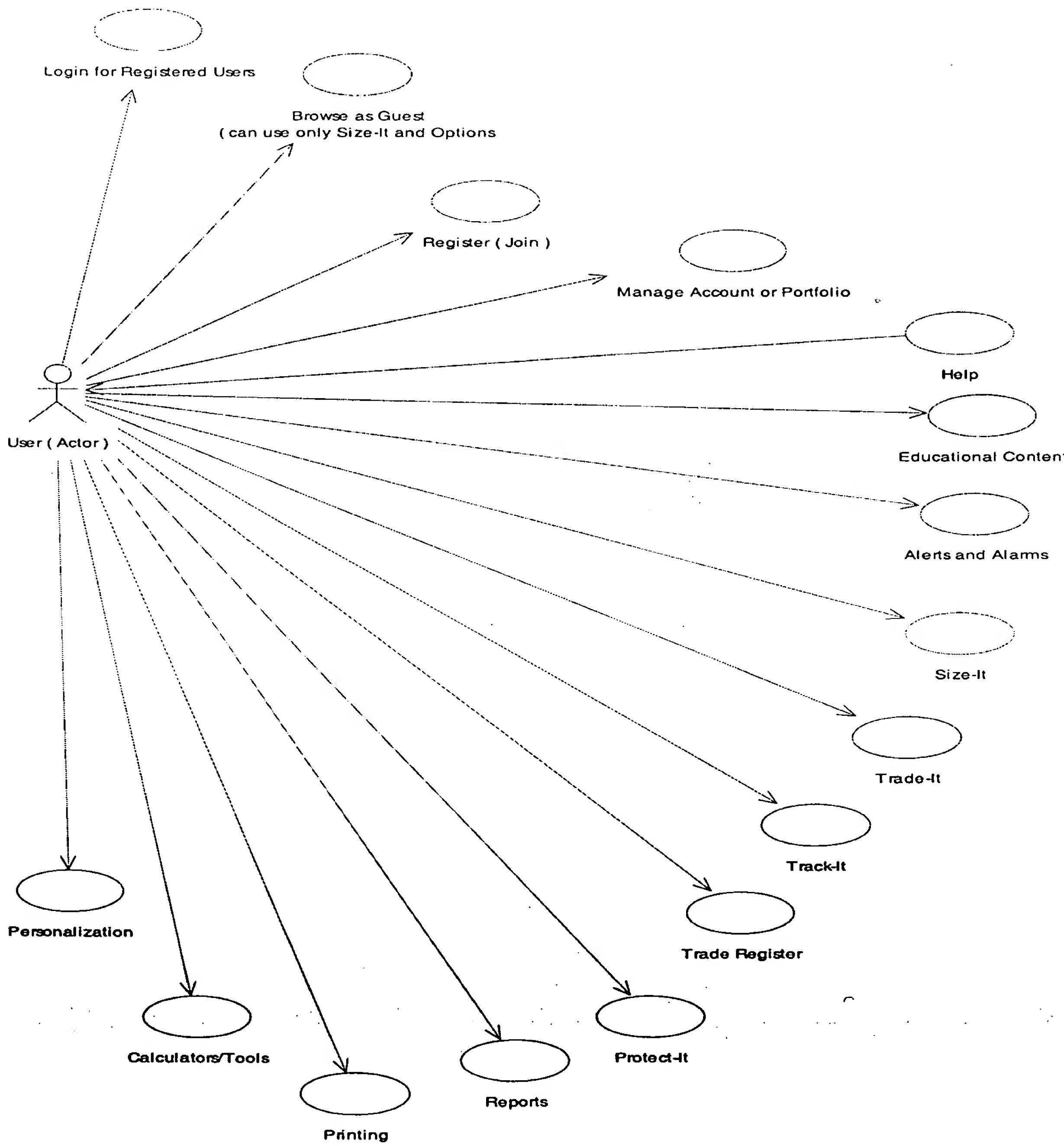


Fig. 4 : Services for the user level

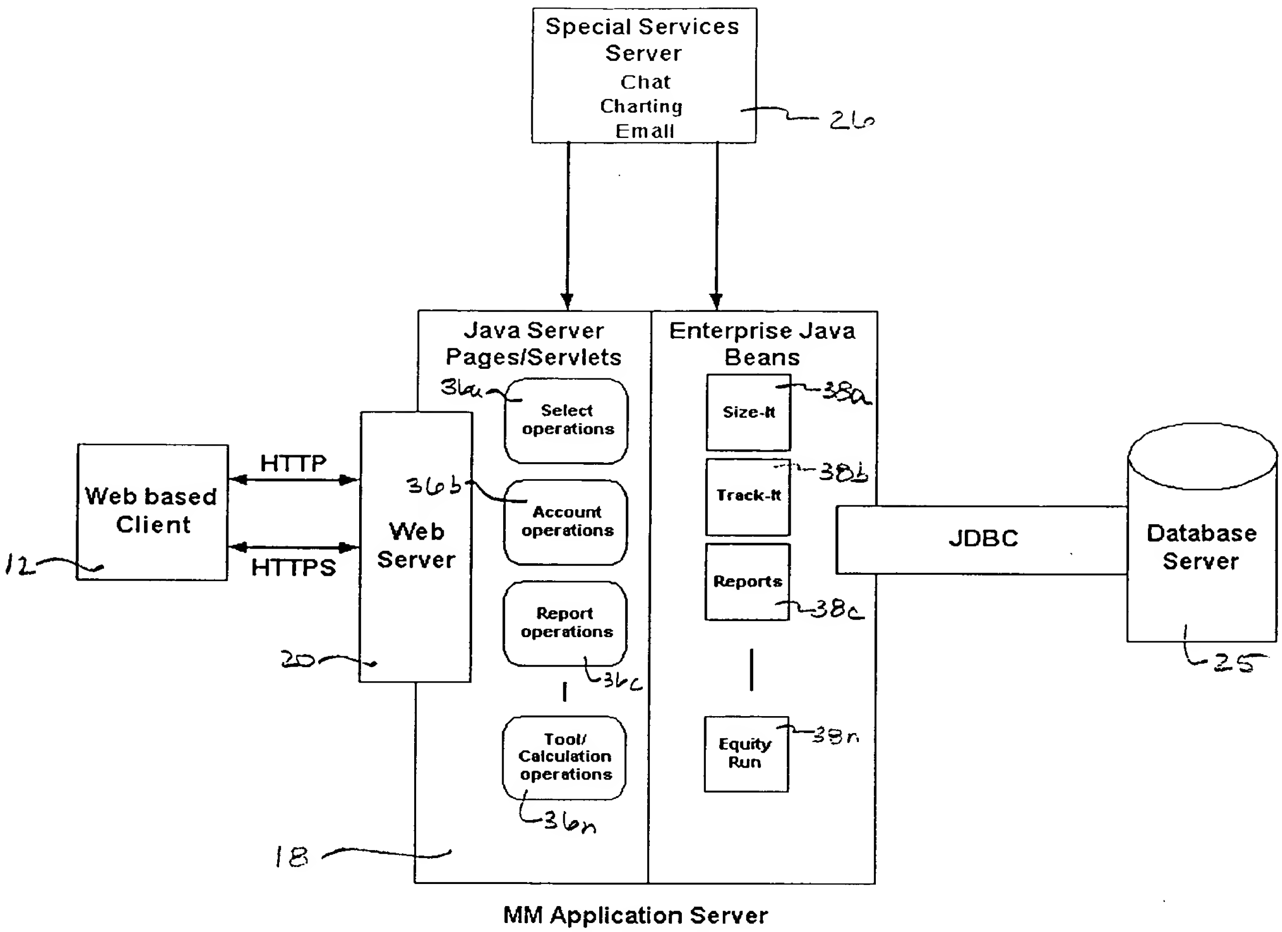
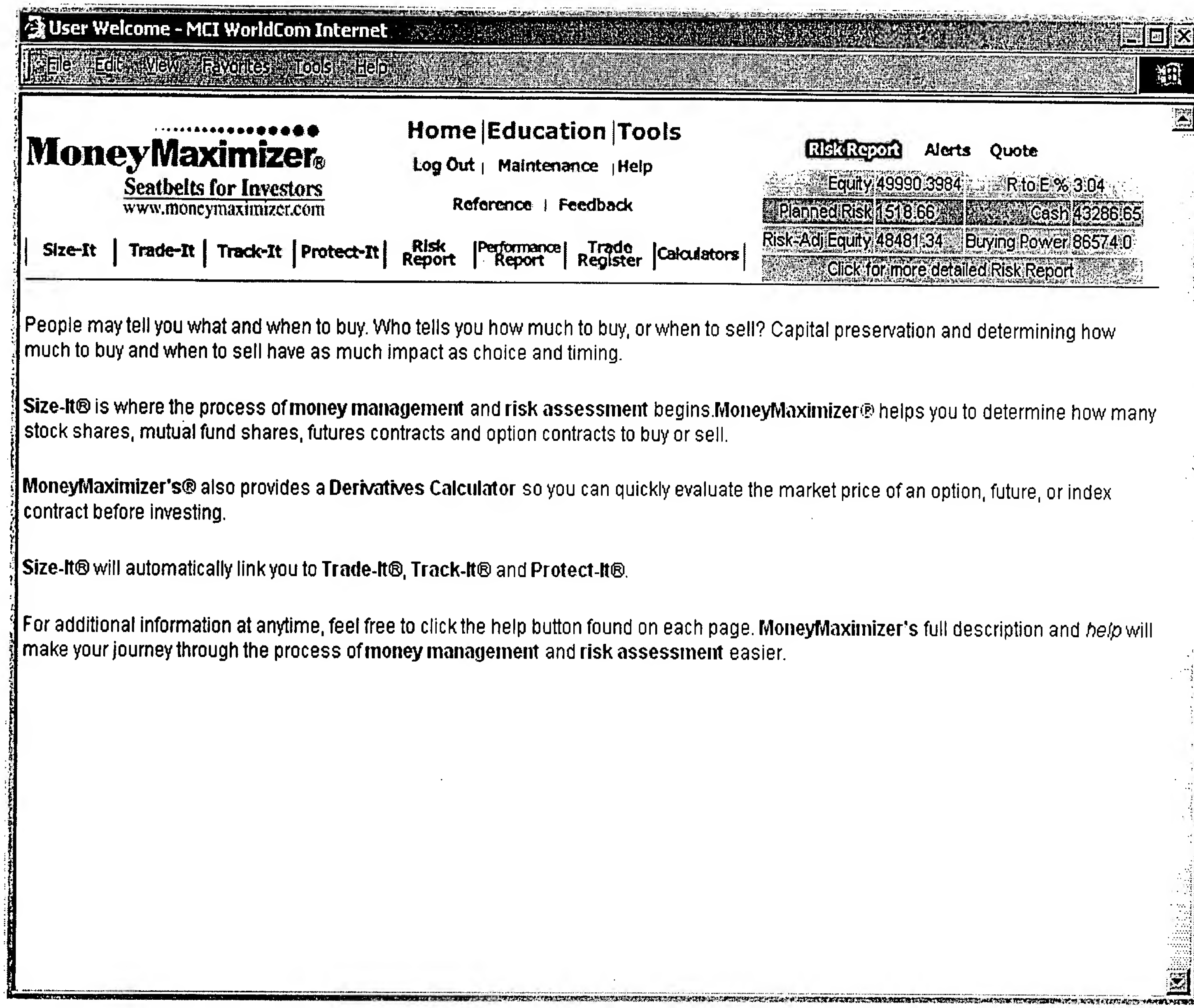


Fig. 5: Logical Deployment of System

Figure 6


User Welcome - MCI WorldCom Internet
File Edit View Favorites Tools Help
MoneyMaximizer®
Seatbelts for Investors
www.moneymaximizer.com
Home | Education | Tools
Log Out | Maintenance | Help
Reference | Feedback
Risk Report Alerts Quote
Equity 49990.3984 R to E % 3.04
Planned Risk 1518.66 Cash 43286.65
Risk-Adj Equity 48481.34 Buying Power 86574.0
Click for more detailed Risk Report
Size-It | Trade-It | Track-It | Protect-It | Risk Report | Performance Report | Trade Register | Calculators
People may tell you what and when to buy. Who tells you how much to buy, or when to sell? Capital preservation and determining how much to buy and when to sell have as much impact as choice and timing.
Size-It® is where the process of money management and risk assessment begins. MoneyMaximizer® helps you to determine how many stock shares, mutual fund shares, futures contracts and option contracts to buy or sell.
MoneyMaximizer's® also provides a Derivatives Calculator so you can quickly evaluate the market price of an option, future, or index contract before investing.
Size-It® will automatically link you to Trade-It®, Track-It® and Protect-It®.
For additional information at anytime, feel free to click the help button found on each page. MoneyMaximizer's full description and help will make your journey through the process of money management and risk assessment easier.

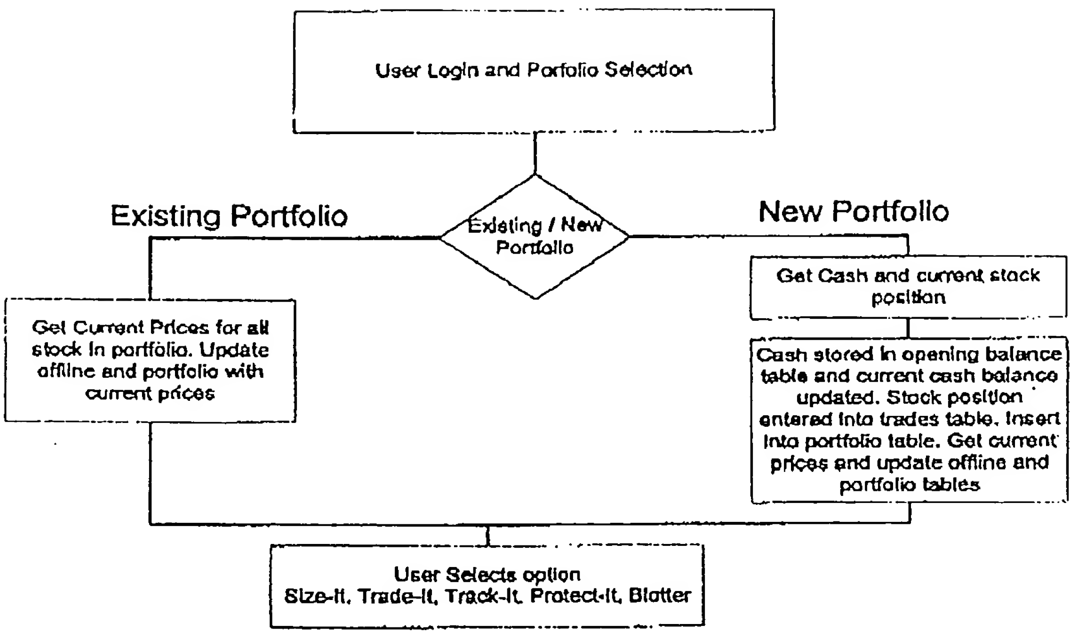

User Login and Porfolio Selection
Existing Portfolio
Existing / New Portfolio
New Portfolio
Get Current Prices for all stock in portfolio. Update offline and portfolio with current prices
Get Cash and current stock position
Cash stored in opening balance table and current cash balance updated. Stock position entered into trades table. Insert into portfolio table. Get current prices and update offline and portfolio tables
User Selects option
Size-It, Trade-It, Track-It, Protect-It, Blotter

FIG 7

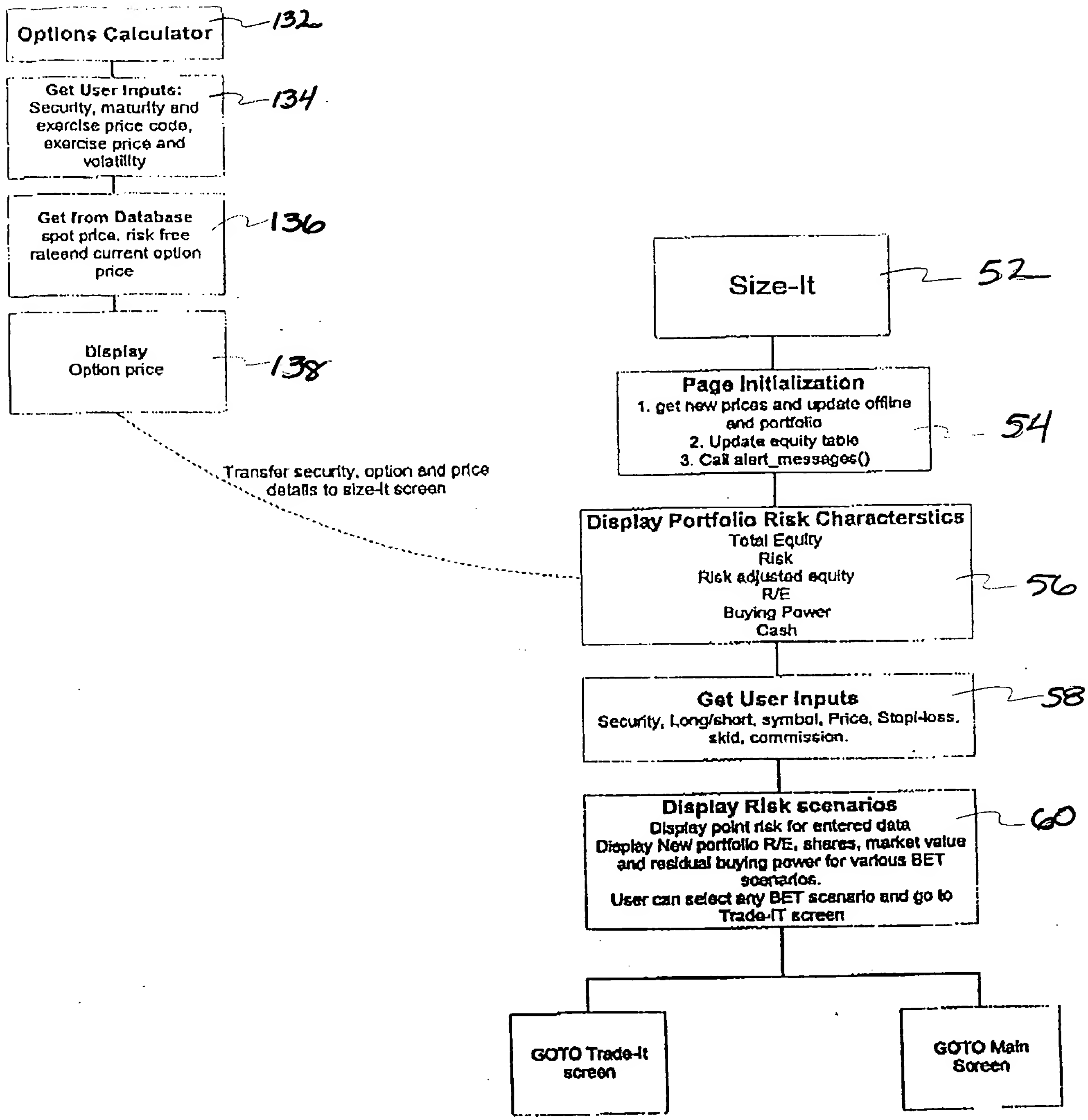
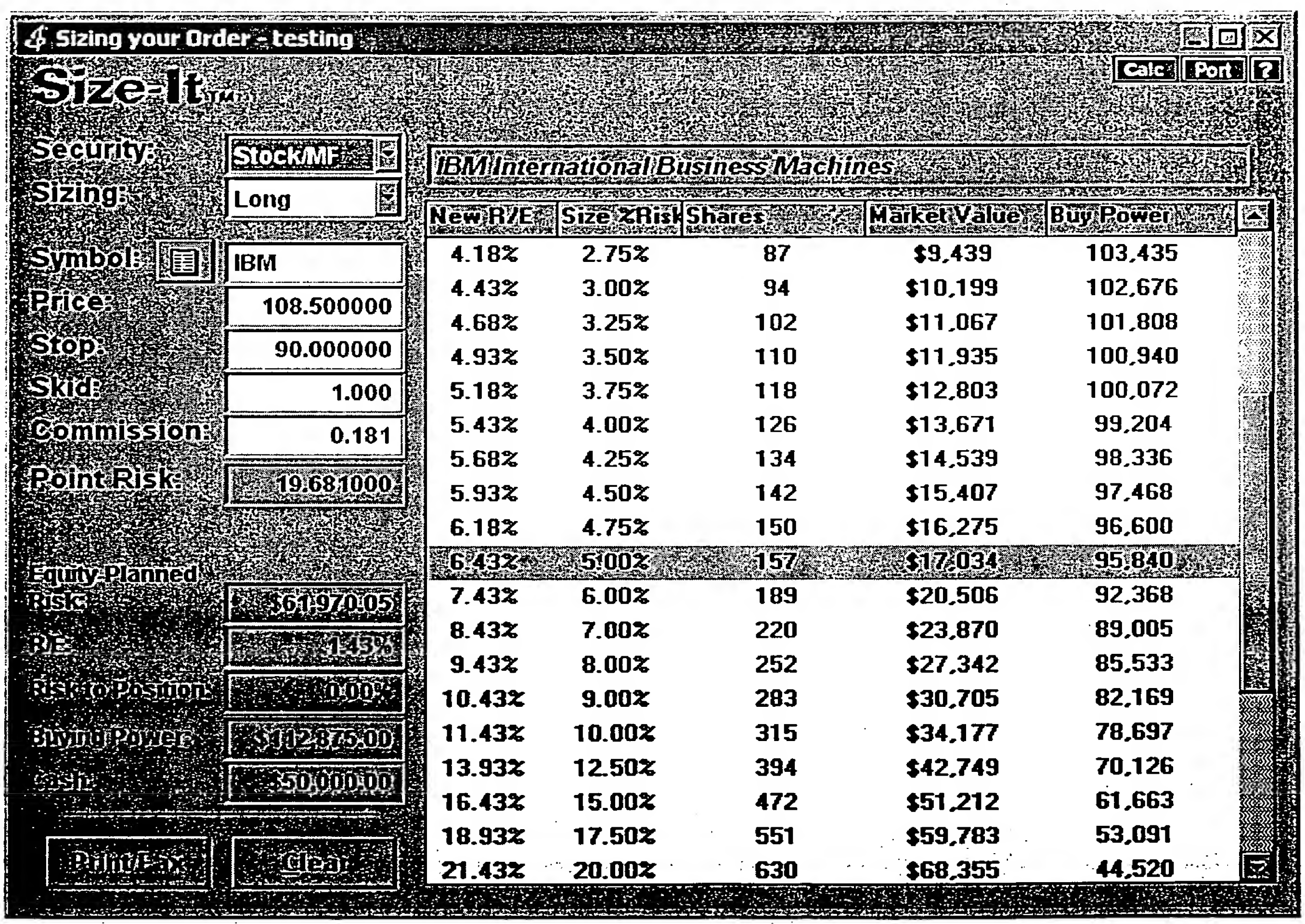

Options Calculator
132
Get User Inputs: Security, maturity and exercise price code, exercise price and volatility
134
Get from Database spot price, risk free rateand current option price
136
Display Option price
138
Transfer security, option and price details to size-It screen
Size-It
52
Page Initialization
1. get new prices and update offline and portfolio
2. Update equity table
3. Call alert_messages()
54
Display Portfolio Risk Characterstics
Total Equity
Risk
Risk adjusted equity
R/E
Buying Power
Cash
56
Get User Inputs
Security, Long/short, symbol, Price, Stopl-loss, skid, commission.
58
Display Risk scenarios
Display point risk for entered data
Display New portfolio R/E, shares, market value and residual buying power for various BET scenarios.
User can select any BET scenario and go to Trade-IT screen
60
GOTO Trade-It screen
GOTO Main Screen

FIG. 8

Figure 9



New R/E	Size %Risk	Shares	Market Value	Buy Power
4.18%	2.75%	87	$9,439	103,435
4.43%	3.00%	94	$10,199	102,676
4.68%	3.25%	102	$11,067	101,808
4.93%	3.50%	110	$11,935	100,940
5.18%	3.75%	118	$12,803	100,072
5.43%	4.00%	126	$13,671	99,204
5.68%	4.25%	134	$14,539	98,336
5.93%	4.50%	142	$15,407	97,468
6.18%	4.75%	150	$16,275	96,600
6.43%	5.00%	157	$17,034	95,840
7.43%	6.00%	189	$20,506	92,368
8.43%	7.00%	220	$23,870	89,005
9.43%	8.00%	252	$27,342	85,533
10.43%	9.00%	283	$30,705	82,169
11.43%	10.00%	315	$34,177	78,697
13.93%	12.50%	394	$42,749	70,126
16.43%	15.00%	472	$51,212	61,663
18.93%	17.50%	551	$59,783	53,091
21.43%	20.00%	630	$68,355	44,520

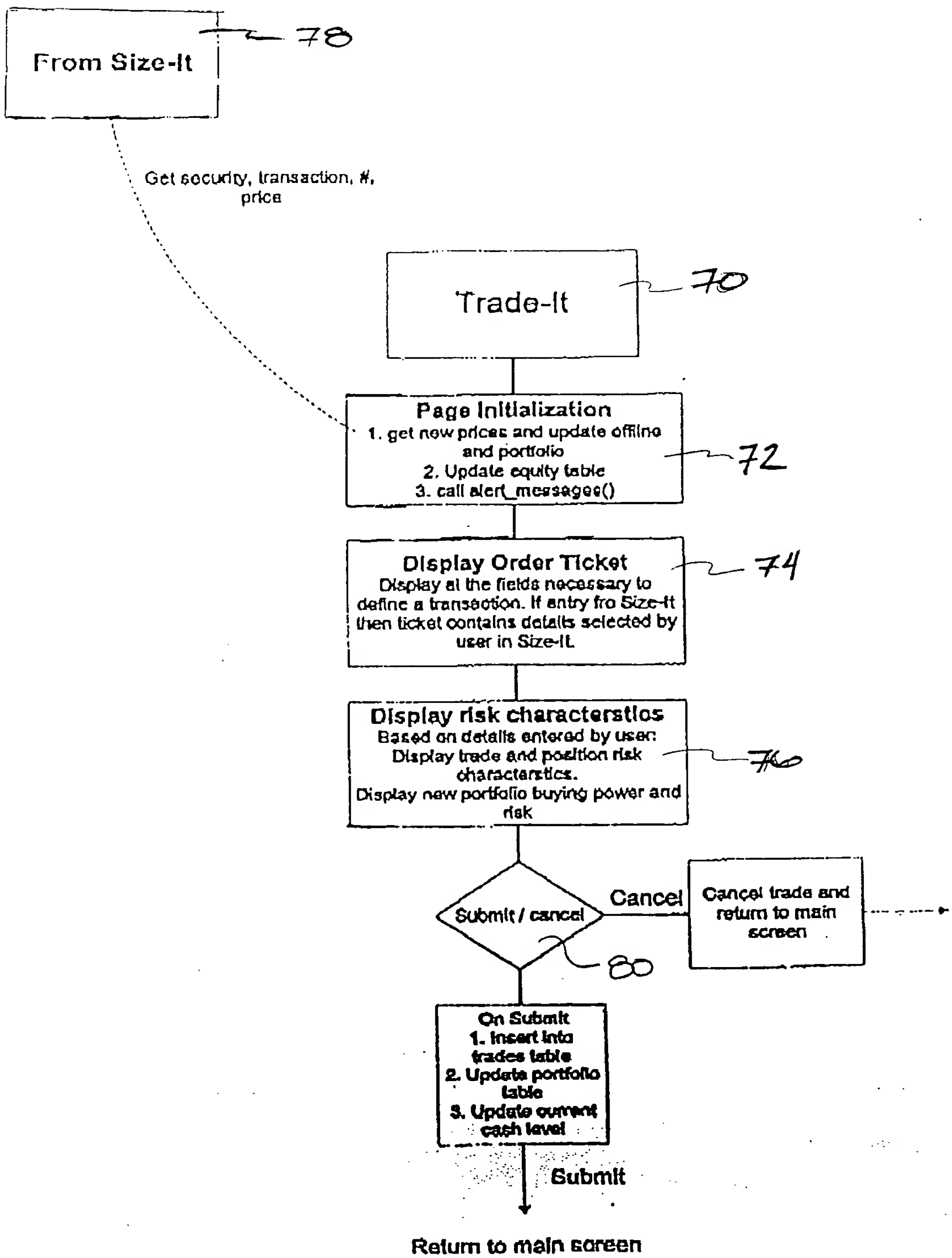
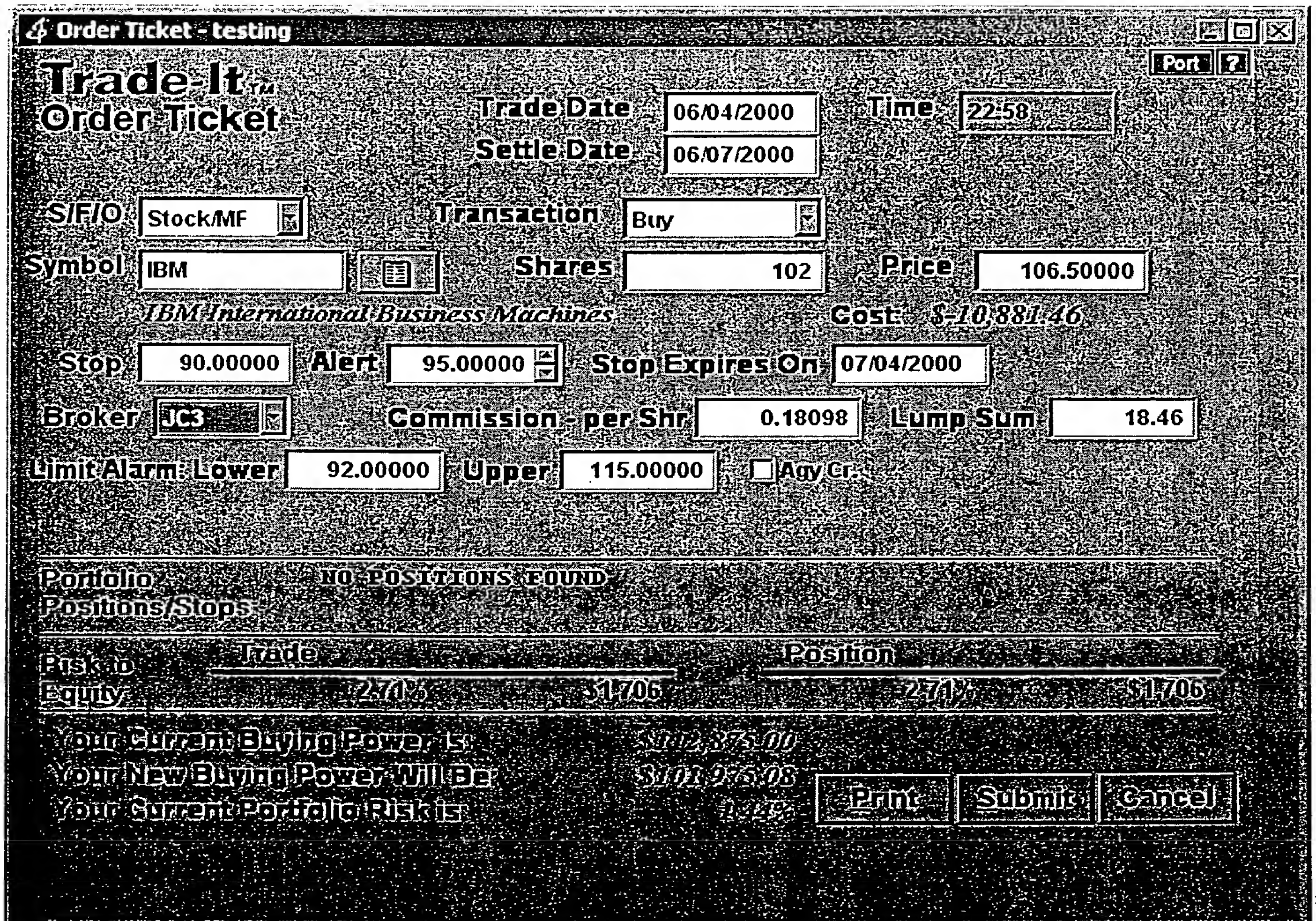

From Size-It
78
Get security, transaction, #, price
Trade-It
70
Page Initialization
1. get new prices and update offline and portfolio
2. Update equity table
3. call alert_messages()
72
Display Order Ticket
Display al the fields necessary to define a transaction. If entry fro Size-It then ticket contains details selected by user in Size-It.
74
Display risk characterstics
Based on details entered by user:
Display trade and position risk characterstics.
Display new portfolio buying power and risk
76
Submit / cancel
80
Cancel
Cancel trade and return to main screen
On Submit
1. Insert into trades table
2. Update portfolio table
3. Update current cash level
Submit
Return to main screen

FIG. 10

Figure 11


Order Ticket - testing
Port
?
Trade-It™
Order Ticket
Trade Date
06/04/2000
Time
22:58
Settle Date
06/07/2000
S/F/O
Stock/MF
Transaction
Buy
Symbol
IBM
Shares
102
Price
106.50000
IBM International Business Machines
Cost: $-10,881.46
Stop
90.00000
Alert
95.00000
Stop Expires On
07/04/2000
Broker
JC3
Commission - per Shr
0.18098
Lump Sum
18.46
Limit Alarm: Lower
92.00000
Upper
115.00000
Agy Cr
Portfolio
Positions/Stops
NO POSITIONS FOUND
Risk to
Equity
Trade
Position
Your Current Buying Power is:
Your New Buying Power Will Be:
Your Current Portfolio Risk is:
Print
Submit
Cancel

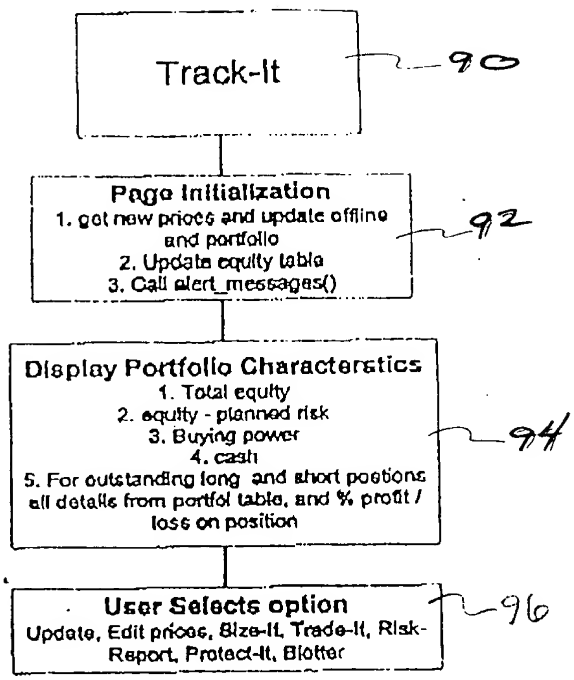


FIG. 12

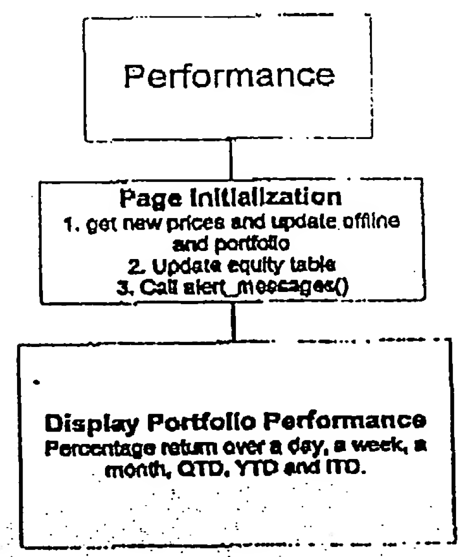
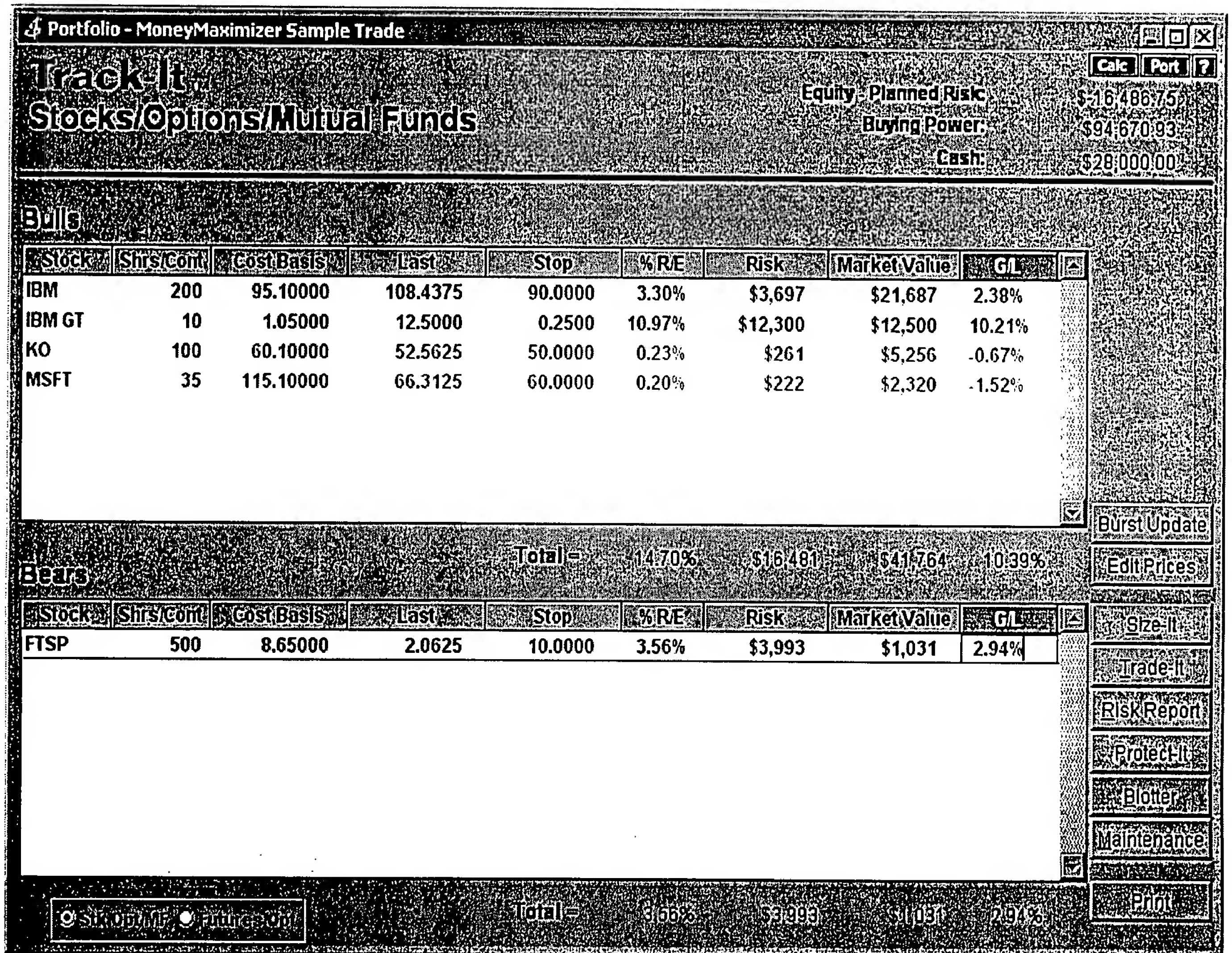


FIG. 17A

Figure 13


Portfolio - MoneyMaximizer Sample Trade
Calc
Port
?
Track-It
Stocks/Options/Mutual Funds
Equity - Planned Risk: $-16,486.75
Buying Power: $94,670.93
Cash: $28,000.00
Bulls
Stock | Shrs/Cont | Cost Basis | Last | Stop | %R/E | Risk | Market Value | G/L
IBM | 200 | 95.10000 | 108.4375 | 90.0000 | 3.30% | $3,697 | $21,687 | 2.38%
IBM GT | 10 | 1.05000 | 12.5000 | 0.2500 | 10.97% | $12,300 | $12,500 | 10.21%
KO | 100 | 60.10000 | 52.5625 | 50.0000 | 0.23% | $261 | $5,256 | -0.67%
MSFT | 35 | 115.10000 | 66.3125 | 60.0000 | 0.20% | $222 | $2,320 | -1.52%
Total = 14.70% $16,481 $41,764 10.39%
Bears
Stock | Shrs/Cont | Cost Basis | Last | Stop | %R/E | Risk | Market Value | G/L
FTSP | 500 | 8.65000 | 2.0625 | 10.0000 | 3.56% | $3,993 | $1,031 | 2.94%
Total = 3.56% $3,993 $1,031 2.94%
Burst Update
Edit Prices
Size-It
Trade-It
Risk Report
Protect-It
Blotter
Maintenance
Print

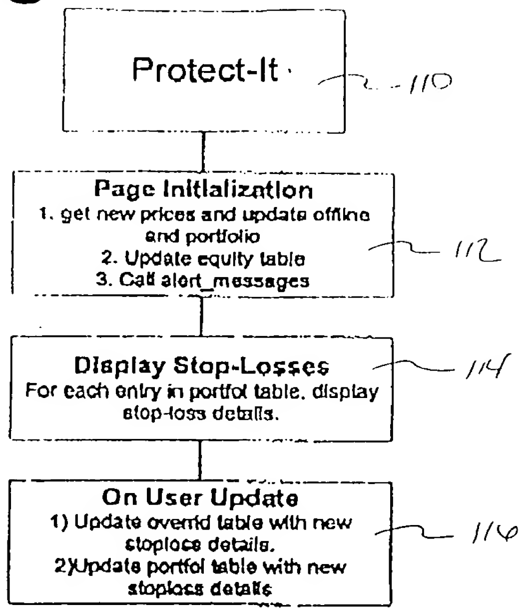

Protect-It
110
Page Initialization
1. get new prices and update offline and portfolio
2. Update equity table
3. Call alert_messages
112
Display Stop-Losses
For each entry in portfol table, display stop-loss details.
114
On User Update
1) Update overrid table with new stoploss details.
2)Update portfol table with new stoploss details
116

FIG. 14

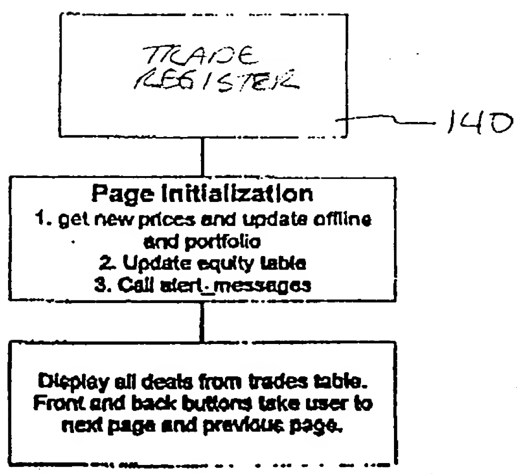

TRADE REGISTER
140
Page Initialization
1. get new prices and update offline and portfolio
2. Update equity table
3. Call alert_messages
Display all deals from trades table. Front and back buttons take user to next page and previous page.

FIG. 19

Figure 15

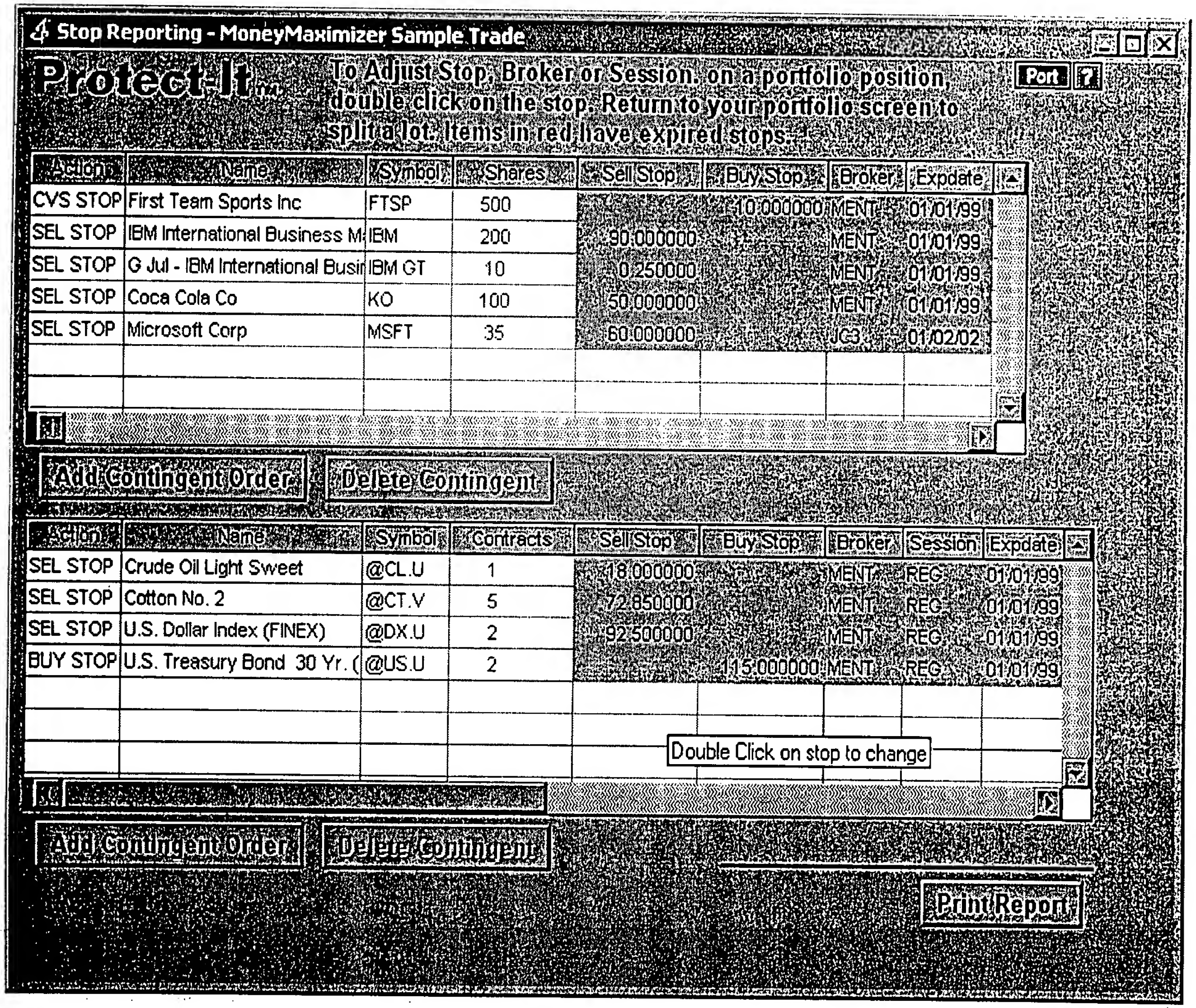

Stop Reporting - MoneyMaximizer Sample Trade
Protect-It
To Adjust Stop, Broker or Session, on a portfolio position, double click on the stop. Return to your portfolio screen to split a lot. Items in red have expired stops.
Port
?
Action Name Symbol Shares Sell Stop Buy Stop Broker Expdate
CVS STOP First Team Sports Inc FTSP 500 10.000000 MENT 01/01/99
SEL STOP IBM International Business M IBM 200 90.000000 MENT 01/01/99
SEL STOP G Jul - IBM International Busi IBM GT 10 0.250000 MENT 01/01/99
SEL STOP Coca Cola Co KO 100 50.000000 MENT 01/01/99
SEL STOP Microsoft Corp MSFT 35 60.000000 JG3 01/02/02
Add Contingent Order
Delete Contingent
Action Name Symbol Contracts Sell Stop Buy Stop Broker Session Expdate
SEL STOP Crude Oil Light Sweet @CL.U 1 18.000000 MENT REG 01/01/99
SEL STOP Cotton No. 2 @CT.V 5 72.850000 MENT REG 01/01/99
SEL STOP U.S. Dollar Index (FINEX) @DX.U 2 92.500000 MENT REG 01/01/99
BUY STOP U.S. Treasury Bond 30 Yr. (@US.U 2 115.000000 MENT REG 01/01/99
Double Click on stop to change
Add Contingent Order
Delete Contingent
Print Report

Figure 16

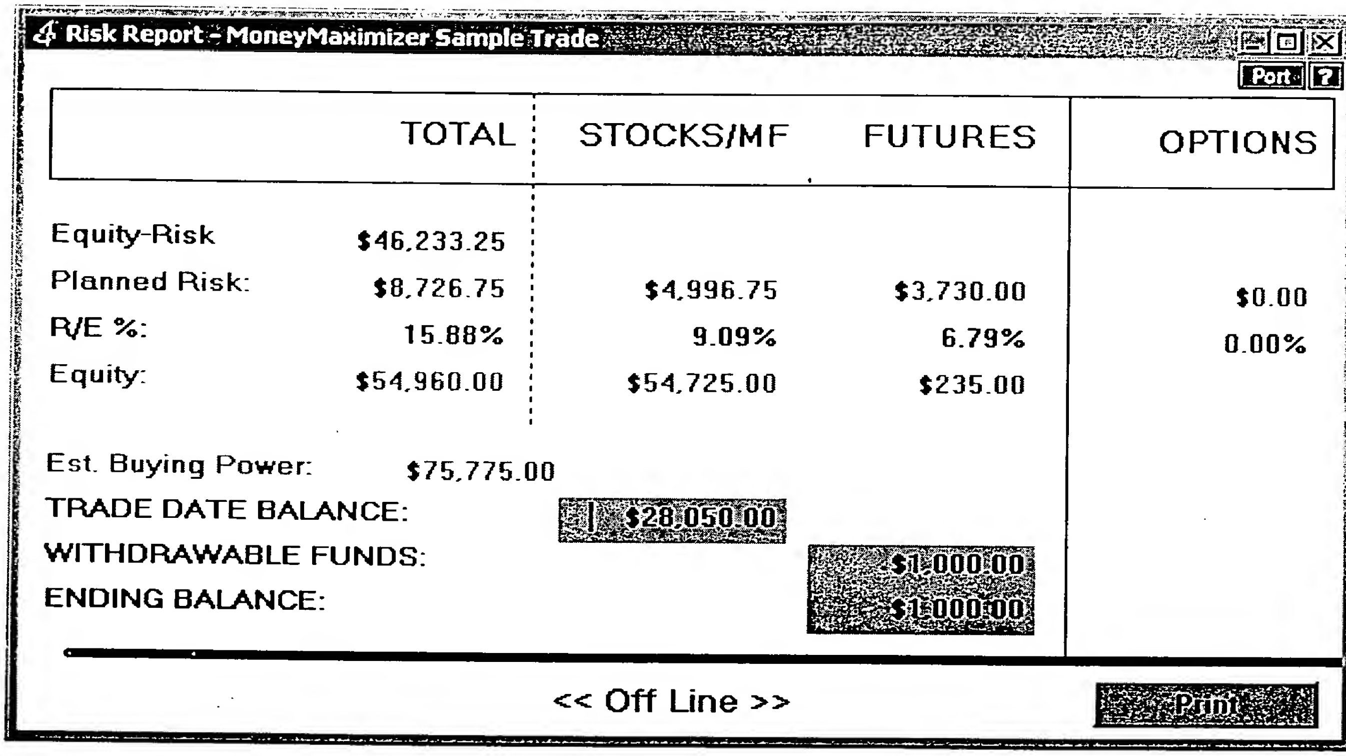

Risk Report - MoneyMaximizer Sample Trade
Port
?
TOTAL
STOCKS/MF
FUTURES
OPTIONS
Equity-Risk
$46,233.25
Planned Risk:
$8,726.75
$4,996.75
$3,730.00
$0.00
R/E %:
15.88%
9.09%
6.79%
0.00%
Equity:
$54,960.00
$54,725.00
$235.00
Est. Buying Power:
$75,775.00
TRADE DATE BALANCE:
$28,050.00
WITHDRAWABLE FUNDS:
$1,000.00
ENDING BALANCE:
$1,000.00
<< Off Line >>
Print

Figure 17

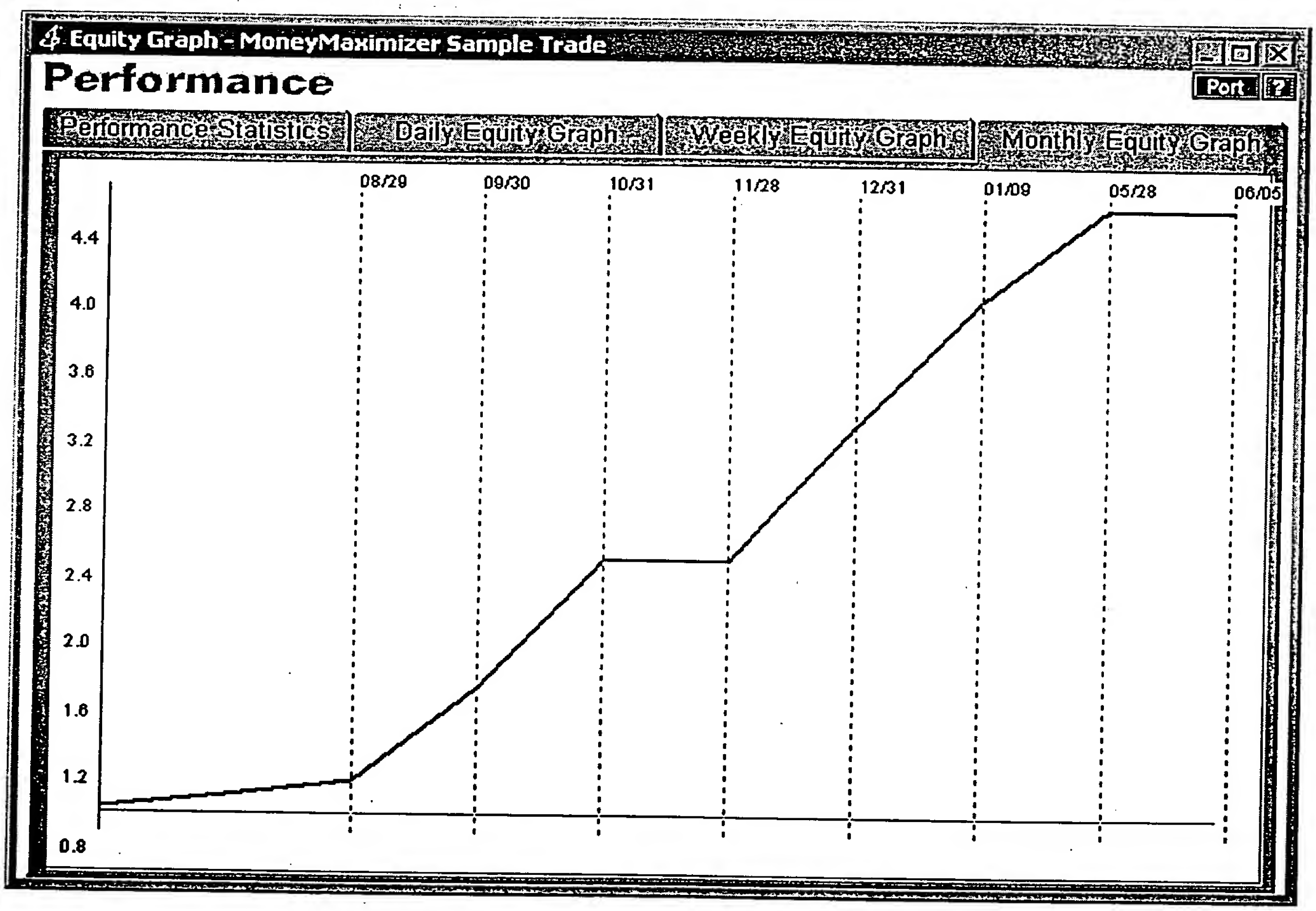

Equity Graph - MoneyMaximizer Sample Trade
Performance
Port
?
Performance Statistics
Daily Equity Graph
Weekly Equity Graph
Monthly Equity Graph
08/29
09/30
10/31
11/28
12/31
01/09
05/28
06/05
4.4
4.0
3.6
3.2
2.8
2.4
2.0
1.6
1.2
0.8

Figure 18

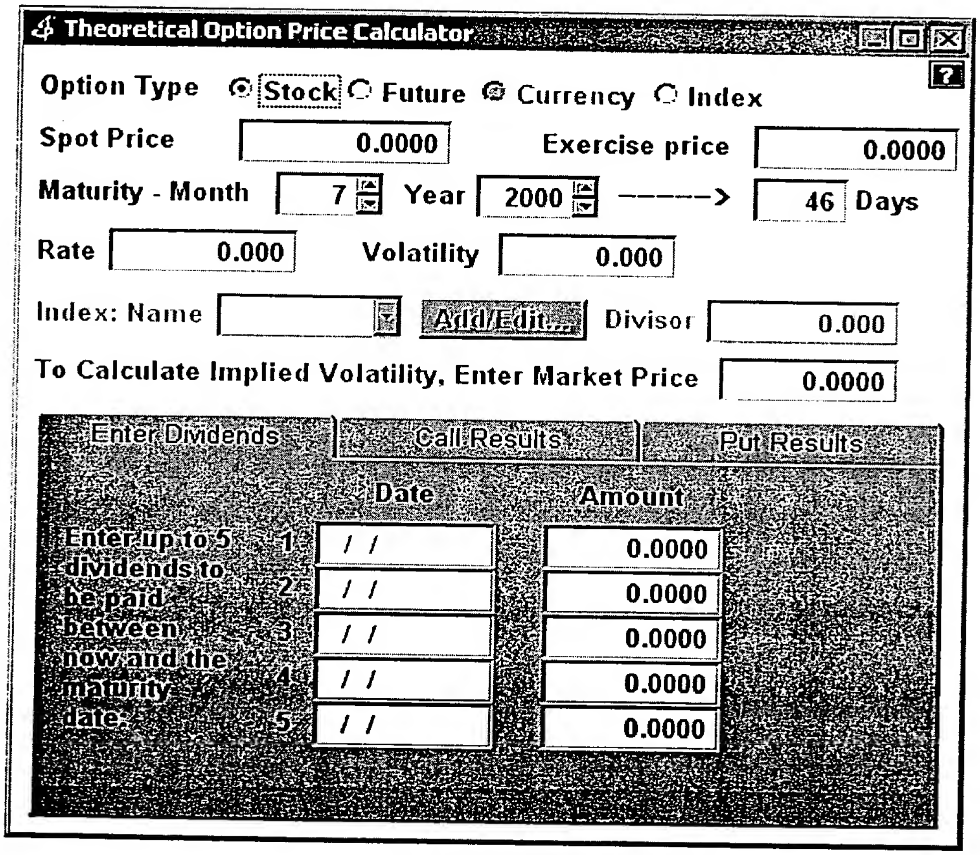

Theoretical Option Price Calculator
Option Type
Stock
Future
Currency
Index
Spot Price
0.0000
Exercise price
0.0000
Maturity - Month
7
Year
2000
------>
46
Days
Rate
0.000
Volatility
0.000
Index: Name
Add/Edit...
Divisor
0.000
To Calculate Implied Volatility, Enter Market Price
0.0000
Enter Dividends
Call Results
Put Results
Date
Amount
Enter up to 5 dividends to be paid between now and the maturity date:
1 / / 0.0000
2 / / 0.0000
3 / / 0.0000
4 / / 0.0000
5 / / 0.0000

Figure 20

Trade Blotter - MoneyMaximizer Sample Trade

Trade Date: 08/21/97 | << | >> | Print | Report Stks | Port

Stocks/Options/Mutual Funds

Buys

Transa	Shrs/Cont	Symbol	Name	Size	Stop	Price	Comm	Secfee	Amount	Agycr	Broker
BUY	200	IBM	IBM International Busines	2.04%	90.0000	95.0000	0.05000		$19,010.00		STOF
BUY	100	KO	Coca Cola Co	1.02%	55.0000	60.0000	0.05000		$6,005.00		STOF
BUY	35	MSFT	Microsoft Corp	1.62%	92.0000	115.0000	0.05000		$4,026.75		STOF

Sells

Transa	Shrs/Cont	Symbol	Name	Size	Stop	Price	Comm	Secfee	Amount	Agycr	Broker

◉ Stk/Opt/MF ○ Futures/Opt

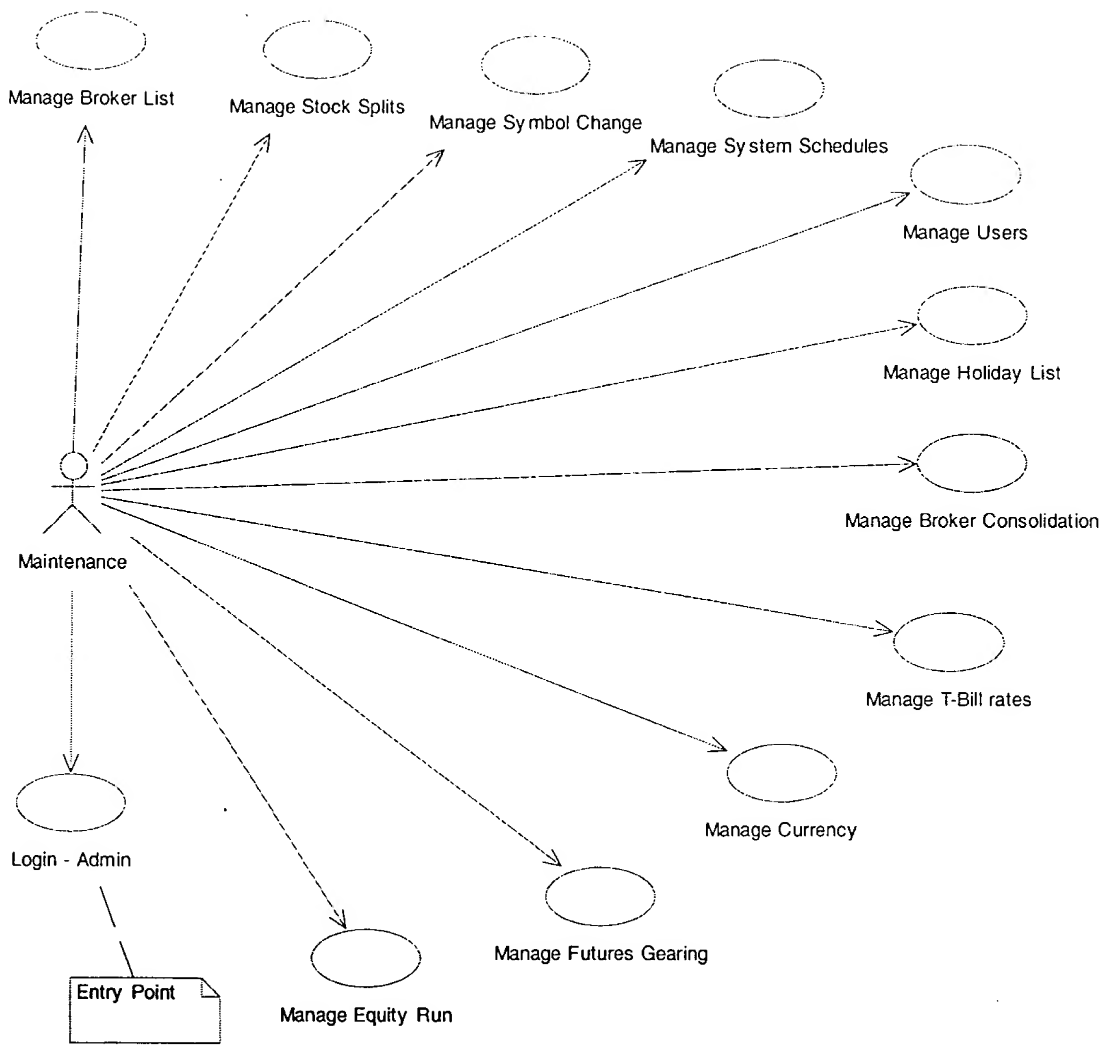


Fig. 21: Administration and Maintenance Services

```
* corecalc.prg
* Procedure to perform core calculations as needed
* when called, main proc will provide "receptacle" params to be passed back

PARAMETERS mport,m_mkt,m_risk,mpwr,missue
* mport = Stock, Future, Option, All, Position
* m_mkt,m_risk = passback for mktval, risk, power
* missue = specific position to check (eg: IBM)

IF mport = "P"     && checking position
    missue = LEFT(missue+SPACE(10),10)
ELSE
    missue = SPACE(10)
ENDIF

mselect = SELECT()
SELECT portfol
if eof()
        mProwHold = 0
else
        mProwHold = recno()
endif
m_smkt = 0
m_srisk = 0
m_fmkt = 0
m_frisk = 0
m_omkt = 0
m_orisk = 0
m_imkt = 0
m_irisk = 0
m_longs = 0
m_shorts = 0
GO TOP
```

Fig. 22

```
DO WHILE .NOT. EOF()
    m_imatch =   ( stock = missue )   && .t. or .f. result
    **** These two vars are for individual issue values, rest are sums
    mIsVal = 0
    mIsDolrisk = 0

    DO CASE
    CASE sfo = "S"        JUST STOCKS
        mIsVal = FxConv(shares*last_sale,stock)
        IF portfol->short
            m_smkt = m_smkt - mIsVal
            mIsDolrisk = FxConv(shares*ABS(stop-last_sale) + comm_in*shares,stock)
            m_shorts = m_shorts + mIsVal
        ELSE
            m_smkt = m_smkt + mIsVal
            mIsDolrisk = FxConv(shares*ABS(last_sale-stop) + comm_in*shares,stock)
            m_longs = m_longs + mIsVal
        ENDIF

        m_srisk = m_srisk + mIsDolRisk
        IF m_imatch
            m_imkt = m_imkt + mIsVal
            m_irisk = m_irisk + mIsDolrisk
        ENDIF
    CASE sfo = "F"      JUST FUTURES
        IF portfol->short
            mIsVal = FxConv((buy_price-last_sale)*shares*gear,stock)
        ELSE
            mIsVal = FxConv((last_sale-buy_price)*shares*gear,stock)
        ENDIF
        m_fmkt = m_fmkt + mIsVal
        IF portfol->short
                mIsDolrisk = FxConv(shares*ABS(stop-last_sale)*gear +
(comm_in*shares),stock)
            m_frisk = m_frisk + mIsDolrisk
        ELSE
                mIsDolrisk = FxConv(shares*ABS(last_sale-stop)*gear +
(comm_in*shares),stock)
            m_frisk = m_frisk + mIsDolRisk
        ENDIF
        IF m_imatch
            m_imkt = m_imkt + mIsVal
            m_irisk = m_irisk + mIsDolrisk
        ENDIF
    CASE sfo = "O"      JUST OPTIONS
        mIsVal = FxConv(shares*last_sale*100,stock)
        IF portfol->short
            m_omkt = m_omkt - mIsVal
            mIsDolrisk = FxConv(100*shares*ABS(stop-last_sale) + (comm_in*shares),stock)
            m_orisk = m_orisk + mIsDolrisk
            m_shorts = m_shorts + mIsVal
        ELSE
            m_omkt = m_omkt + mIsVal
            mIsDolrisk = FxConv(100*shares*ABS(last_sale-stop) + (comm_in*shares),stock)
            m_orisk = m_orisk + mIsDolrisk
            m_longs = m_longs + mIsVal
        ENDIF
        IF m_imatch
            m_imkt = m_imkt + mIsVal
            m_irisk = m_irisk + mIsDolrisk
        ENDIF
    ENDCASE
    SKIP
ENDDO
```

Fig. 23

```
DO CASE
CASE mport = "A"        ALL/TOTAL EVERYTHING
    m_mkt = m_smkt + m_fmkt + m_omkt
    m_risk = m_srisk + m_frisk + m_orisk
CASE mport = "S"        JUST STOCKS
    m_mkt = m_smkt
    m_risk = m_srisk
CASE mport = "F"        JUST FUTURES
    m_mkt = m_fmkt
    m_risk = m_frisk
CASE mport = "O"        JUST OPTIONS
    m_mkt = m_omkt
    m_risk = m_orisk
CASE mport = "P"        JUST INDIVIDUAL POSITIONS
    m_mkt = m_imkt
    m_risk = m_irisk
ENDCASE

mpwr = (2*(mtdbalance+mwdbalance+m_longs-m_shorts)) - m_longs - m_shorts

sele portfol
if mProwHold > 0
        goto (mProwHold)
endif
SELECT (mselect)

RETURN
```

Fig. 24

Figure 25

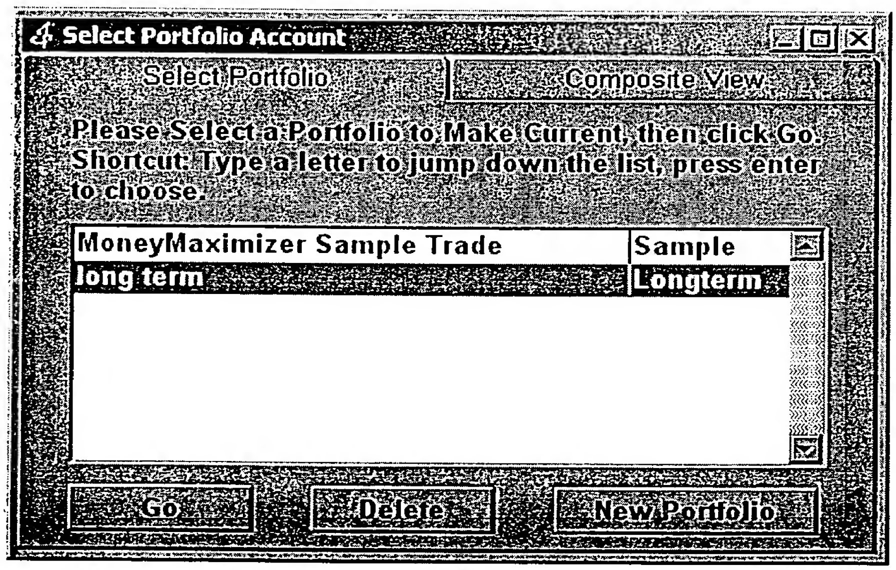

Select Portfolio Account
Select Portfolio
Composite View
Please Select a Portfolio to Make Current, then click Go.
Shortcut: Type a letter to jump down the list, press enter to choose.
MoneyMaximizer Sample Trade
Sample
long term
Longterm
Go
Delete
New Portfolio

Figure 26

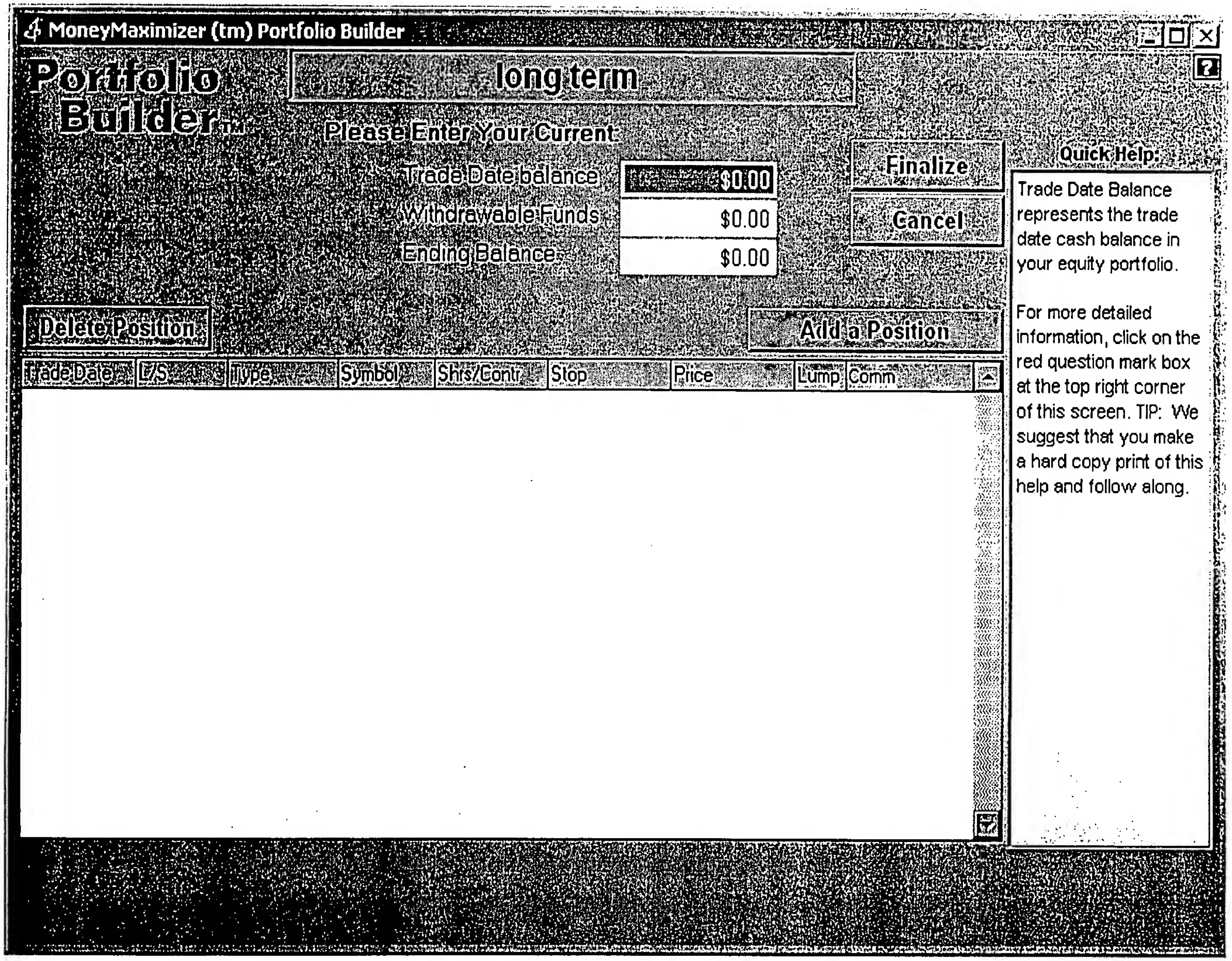

MoneyMaximizer (tm) Portfolio Builder
Portfolio Builder™
long term
Please Enter Your Current:
Trade Date balance
$0.00
Withdrawable Funds
$0.00
Ending Balance
$0.00
Finalize
Cancel
Quick Help:
Trade Date Balance represents the trade date cash balance in your equity portfolio.
For more detailed information, click on the red question mark box at the top right corner of this screen. TIP: We suggest that you make a hard copy print of this help and follow along.
Delete Position
Add a Position
Trade Date
L/S
Type
Symbol
Shrs/Contr
Stop
Price
Lump
Comm

Figure 27

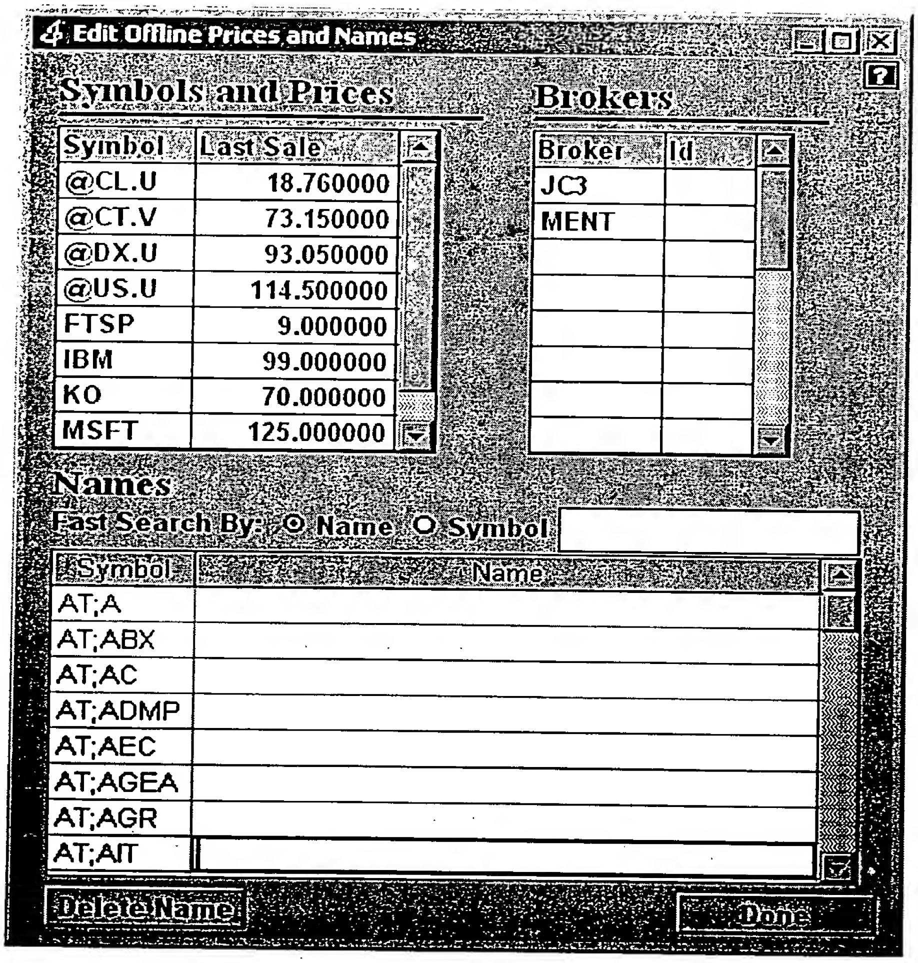

Edit Offline Prices and Names
Symbols and Prices
Symbol
Last Sale
@CL.U 18.760000
@CT.V 73.150000
@DX.U 93.050000
@US.U 114.500000
FTSP 9.000000
IBM 99.000000
KO 70.000000
MSFT 125.000000
Brokers
Broker
Id
JC3
MENT
Names
Fast Search By: Name Symbol
Symbol
Name
AT;A
AT;ABX
AT;AC
AT;ADMP
AT;AEC
AT;AGEA
AT;AGR
AT;AIT
Delete Name
Done

Figure 28

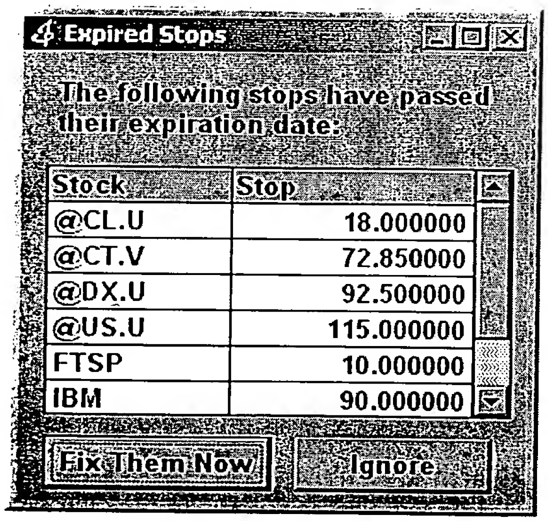
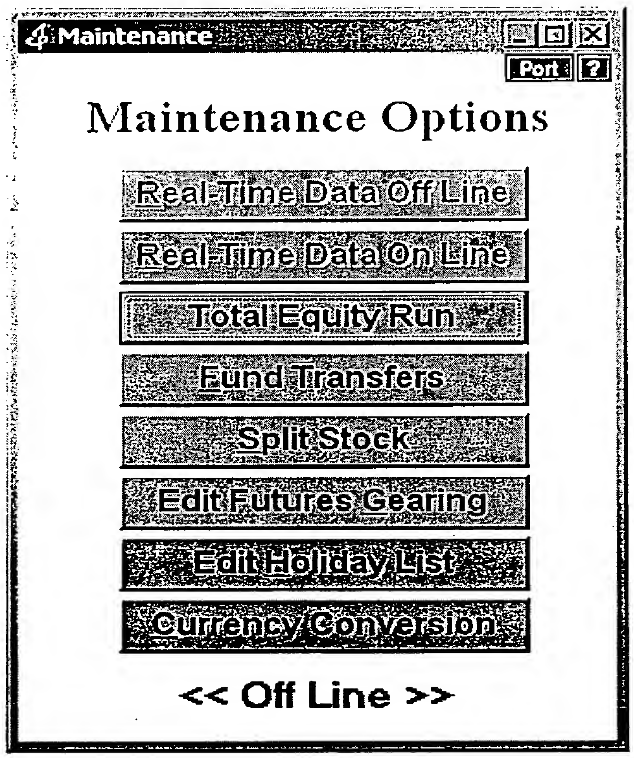

Expired Stops
The following stops have passed their expiration date:
Stock
Stop
@CL.U
18.000000
@CT.V
72.850000
@DX.U
92.500000
@US.U
115.000000
FTSP
10.000000
IBM
90.000000
Fix Them Now
Ignore

Figure 29


Maintenance
Port
?
Maintenance Options
Real-Time Data Off Line
Real-Time Data On Line
Total Equity Run
Fund Transfers
Split Stock
Edit Futures Gearing
Edit Holiday List
Currency Conversion
<< Off Line >>